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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,259	12/15/2003	Yasuhiko Nagaoka	0879-0435P	1479
2292 7590 10/04/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER ABDI, AMARA	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 10/04/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary**

Application No.

10/734,259

Applicant(s)

NAGAOKA ET AL.

Examiner

Amara Abdi

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's response to the last Office Action, filed on July 27, 2007 has been entered and made of record.

#### **Remarks**

2. Applicant's argument with respect to claims 1-22, have been fully considered, but they are not persuasive.

a. Applicant argues that Zhang fails to teach or suggest, "cropping said plurality of digital photos to generate images of isolated objects of interest, applying an object recognition algorithm to determine the similarity of isolated objects with a reference model, and displaying a plurality of objects arranged as a function of the determined similarity". Furthermore, Zhang fails to teach or suggest, "receiving user input to associate said objects with a particular classification.

However, in response to applicant's arguments, Examiner would like to point out that claim language is given its broadest reasonable interpretation. In the instant case, Zhang clearly shows in figure 4 an exemplary set of facial feature components for annotations faces in digital images. The facial components features are each contained within one or more rectangular. Zhang clearly means by the facial component features the isolated objects from the face such as the eyes, nose, and mouth (paragraph [0046], line 1-12). Zhang clearly shows the cropping of digital image to generate of face appearance features which means the isolated objects of the face such as the eyes, mouth, and nose (paragraph [0083], line 1-4), and applying an object recognition algorithm, where a set of object detectors is derived from a robust algorithm are utilized

Art Unit: 2624

to detect each facial component in the corresponding area (paragraph [0046], line 7-10), the facial components means clearly the isolated object such as eyes, nose, and mouth. Also, Zhang discloses the determining of the similarity of isolated objects with a reference model, where the candidate name list is sorted according to the similarity measures between unlabeled and labeled faces (the labeled faces is read as the reference model) (paragraph [0076], line 6-8). Furthermore, the Examiner interpreted that it is obvious to display the plurality of objects arranged as a function of the determined similarity, since the candidate name list is sorted according to the similarity measures, and it's read the broad claim language calls for "using a monitor to display digital images" (paragraph [0036], line 3-4). Finally, Zhang clearly shows the receiving of user input to associate the objects with the particular classification, where the user explicit annotation of faces in digital images (paragraph [0076], line 1-2), (the faces are read as objects) and associating the candidate name list with multi-class classification task (paragraph [0076], line 11-13).

Therefore, the rejection of claim language based on Zhang is good and should be sustained.

**Claim Rejections - 35 USC § 112**

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 6, and claim 12, line 7, recite the limitation "a plurality of objects". There is insufficient antecedent basis for the limitation in the claims. The "plurality of objects" is not introduced before. It is unclear if this limitation of the claims is intended to refer to the "objects" on line 2 of claim 1 or to the "isolated objects" on line 3 of claim 1. However, "a plurality of objects" differs from the "objects", and the "isolated objects".

**Claim Rejections - 35 USC § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1,3-5,10,12,14-16, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (US 2004/0264780).

**(1) Regarding claims 1 and 12:**

Zhang et al. disclose a computer-based method and system for organizing digital photos (paragraph [0004], line 1-2), comprising:

extracting objects of interest from a plurality of digital photos (paragraph [0042], line 6-7, and paragraph [0043], line 1-9);

cropping said plurality of digital photos to generate images of isolated objects of interest (paragraph [0043], line 1-9), (the face appearance features are read as the isolated objects of interest);

applying an object recognition algorithm (paragraph [0046], line 7-10) to determine the similarity of isolated objects (paragraph [0051], line 1-4) with a reference model (paragraph [0076], line 6-8), (the labeled faces are read as a reference model);

displaying a plurality of objects arranged as a function of the determined similarity (paragraph [0076], line 6-7; and paragraph [0036], line 3-4), (the Examiner interpreted that it's obvious to display the plurality of objects arranged as a function since the candidate name list is sorted according to the similarity measures); and

receiving user input (paragraph [0076], line 1-2) to associate said objects (the faces are read as objects) with a particular classification (paragraph [0076], line 11-13), (the annotating of individual faces as multi-class classification is read as the associating of the objects to a particular classification).

**(2) Regarding claims 3 and 14:**

Zhang et al. further disclose the method and system (paragraph [0004], line 1-2), where the objects are faces (paragraph [0017], line 1, and line 8-9).

**(3) Regarding claims 4 and 15:**

Zhang et al. further disclose the method and system (paragraph [0004], line 1-2), where isolated faces are displayed in a view that includes an area surrounding the face (Fig. 3 and 4, paragraph [0043], line 3-4).

**(4) Regarding claims 5 and 16:**

Zhang et al. further disclose the method and system (paragraph [0004], line 1-2) comprising annotating image objects based on said classification (paragraph [0042], line 1-3; and paragraph [0076], line 11-13).

**(5) Regarding claims 10 and 21:**

Zhang et al. further disclose the method and system (paragraph [0004], line 1-2), where the step of displaying a plurality of objects (paragraph [0036], line 3-4) displays the objects in order of similarity to the reference model (paragraph [0076], line 6-8), (the labeled faces is read as reference mode).

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2,6-8,13, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. in view of Hanna et al. (US 6,714,665).

**(1) Regarding claims 2 and 13:**

Zhang et al. disclose the entire subject as described in claim 1 above.

Zhang et al. do not explicitly mention the repeating of the recognition algorithm and the display as more objects are grouped as belonging to a certain identity.

Hanna et al., in analogous environment, teaches a recognition system which

Art Unit: 2624

obtains and analyze images, where repeating the step 1530 (column 21, line 19), (the repeating of step 1520 is read as the same concept as repeating the steps of recognition algorithm and the display).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hanna et al., where repeating the step 1520, in the method of Zhang et al. in order to identifying objects or individuals in a passive way that is both fast and accurate (column 1, line 51-53).

**(2) Regarding claims 6 and 17:**

Zhang et al. disclose the entire subject as described in claim 1 above.

Zhang et al. do not explicitly mention the controlling of photo presentation based on the classification.

Hanna et al., in analogous environment, teaches a recognition system which obtains and analyze images, where controlling of photo presentation based on the classification (column 12, line 6-8, and line 18-22), (the photo presentation is read as the image information of a person, and the use of control process is read as the same concept as the controlling photo presentation).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hanna et al., where controlling a photo presentation, in the method of Zhang et al. in order to identifying objects or individuals in a passive way that is both fast and accurate (column 1, line 51-53).

**(3) Regarding claims 7 and 18:**

Zhang et al. disclose the entire subject as described in claim 6 above.



Furthermore, Zhang et al. disclose the method, where labeling the multiple faces (paragraph [0022], line 1-6, and paragraph [0074], line 6-8), (the labeling of multiple faces is read as the same concept as displaying a label for isolated objects of interest).

Zhang et al. do not explicitly mention the controlling of photo presentation based on the classification.

Hanna et al., in analogous environment, teaches a recognition system which obtains and analyze images, where controlling of photo presentation based on the classification (column 12, line 6-8, and line 18-22), (the photo presentation is read as the image information of a person, and the use of control process is read as the same concept as the controlling photo presentation).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hanna et al., where controlling a photo presentation, in the method of Zhang et al. in order to identifying objects or individuals in a passive way that is both fast and accurate (column 1, line 51-53).

**(4) Regarding claims 8 and 19:**

Zhang et al. disclose the entire subject as described in claim 1 above.

Zhang et al. do not explicitly mention the controlling of a zoom function based on the classification.

Hanna et al., in analogous environment, teaches a recognition system which obtains and analyze images, where controlling the zoom function (column 11, line 12-13) based on the classification (column 12, line 6-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hanna et al., where controlling the zoom function, in the method of Zhang et al. in order to identifying objects or individuals in a passive way that is both fast and accurate (column 1, line 51-53).

9. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. and Hanna et al., as applied to claim 6 above, and further in view of Mathe (US-PGPUB 2005/0060636).

Zhang et al. and Hanna et al. disclose all the subject matter as described in claim 6 above.

Zhang et al. and Hanna et al. do not explicitly mention that the photo presentation is slide presentation.

Mathe, in analogous environment, teaches a digital photo Album, where the Photo presentation is slide presentation (paragraph [007], line 9-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Mathe, where the Photo presentation is slide presentation, in the method of Zhang et al. in order to solve the problem of printing pictures by reducing cost, and it is much faster and easier to learn to use than a computer (paragraph [0007], line 11-13).

10. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. in view of Neff et al. (US 6,751,780).

Zhang et al. disclose all the subject matter as described in claim 1 above.

Zhang et al. do not explicitly mention that the user input drags an image of an object of interest into a display area associated with the classification.

Neff et al., in analogous environment, teaches a user interface for initiating the export of an optimized scanned document using drag drop, where the user input drags an image of an object of interest into a display area (See the Abstract), (the display area is read as scanner window) associated with the classification (column 5, line 48-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Neff et al., where the user input drags an image of an object of interest into a display area, in the system of Zhang et al. in order to click on a selected region in a preview scan of a document and drag it to an open application or a desktop to launch an optimized final scan of the selected region (column 1, line 56-59).

### **Conclusion**

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2624

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

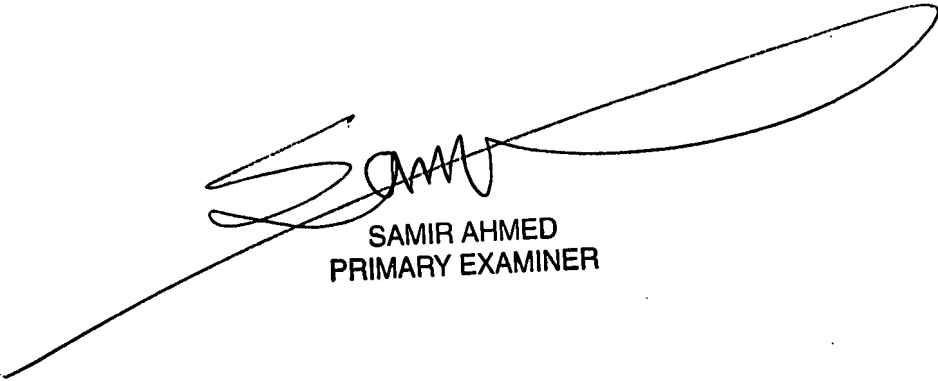
**Contact Information:**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi  
09/27/2007



SAMIR AHMED  
PRIMARY EXAMINER